WHAT IS CLAIMED IS :

1. A method of screening an optical fiber during a fiber draw process, comprising pulling a length of optical fiber from an optical fiber preform at a fiber draw speed greater than 20 m/s, imparting a desired tensile stress to said fiber to thereby test the strength of said fiber and subsequent to said imparting a tensile stress, winding said fiber onto a spool.

2. The method of claim 1, wherein said desired tensile stress is greater than about 80 psi.

3. The method of claim 1, wherein said desired tensile stress is greater than about 95 psi.

4. The method of claim 1, wherein said spool is a shipping spool to be shipped to a customer, and said fiber is wound onto said shipping spool.

5. The method of claim 4, further comprising, shipping said shipping spool with said fiber thereon to a customer.

6. The method of claim 2, wherein said fiber is wound onto a spool which enables access to both ends of said fiber on said spool.

7. The method of claim 2, wherein said fiber is wound onto said shipping spool in a manner which enables both ends of said fiber to be accessed while said fiber is stored on said spool.

8. The method of claim 4, wherein said fiber is wound onto said shipping spool in a manner which enables both ends of said fiber to be accessed while said fiber is stored on said spool.

9. The method of claim 5, wherein said method further comprising, prior to said shipping, conducting tests on said fiber while said fiber is on said spool.

10. The method of claim 9, wherein said tests include at least one test selected from the group consisting of optical time domain reflectometry, dispersion geometry and polarization mode dispersion.

11. The method of claim 2, further comprising conducting at least one optical property test on said fiber while said fiber is on said shipping spool by a testing method which involves connecting one end of said fiber on said spool to a light source, and evaluating the light at the other end of the fiber.

12. The method of claim 9, further comprising conducting at least one optical property test on said fiber while said fiber is on said shipping spool by a testing method which involves connecting one end of said fiber on said spool to a light source, and evaluating the light at the other end of the fiber.

13. The method of claim 1, wherein said imparting a tensile stress comprises feeding said fiber through a screener capstan which works in conjunction with another capstan which is in contact with said fiber to impart said desired tensile stress to said fiber during said draw process, and said screener capstan is rotated at a higher circumferential speed than said other capstan to thereby impart said desired tensile stress.

14. The method of claim 13, further comprising monitoring the tension in the fiber in said draw process and adjusting the speed of said screener capstan in response to said monitored tension, to thereby maintain said tensile stress.

15. The method of claim 14, wherein said monitoring step comprises monitoring said tension via a load cell operatively connected to said fiber.

16. The method of claim 15, wherein said load cell is connected to a pulley which in turn contacts said fiber, said fiber contact causing said pulley to rotate

17. The method of claim 15, wherein a computer monitors said tension in said fiber via said load cell.

18. The method of claim 4, wherein less than 150 km of fiber is wound onto said spool.

19. The method of claim 4, wherein a length of fiber is wound onto said spool which is sufficiently short to enable the attenuation of said fiber to be measured while said fiber is on said spool.

20. A method of screening an optical fiber during a fiber draw process, comprising pulling a length of optical fiber from an optical fiber preform, imparting a desired tensile stress to said fiber to thereby test the strength of said fiber and subsequent to said imparting a desired tensile stress, winding said fiber onto a spool which is to be shipped to a customer or optical fiber cabling operation with said fiber thereon.

21. The method of claim 20, wherein said desired tensile stress is greater than about 80 psi.

22. The method of claim 20, wherein said desired tensile stress is greater than about 95 psi.

23. The method of claim 20, further comprising shipping said spool with said fiber thereon to a customer.

24. The method of claim 20, wherein said fiber is wound onto said spool in a manner which enables access to both ends of said fiber while said fiber is stored on said spool.

25. The method of claim 23, wherein said fiber is wound onto said shipping spool in a manner which enables both ends of said fiber to be accessed while said fiber is stored on said spool.

26. The method of claim 20, wherein said fiber is wound onto said shipping spool in a manner which enables both ends of said fiber to be accessed while said fiber is stored on said spool.

27. The method of claim 26, wherein said method further comprising, prior to said shipping, conducting tests on said fiber while said fiber is on said spool.

28. The method of claim 26, wherein said method further comprising, prior to said shipping, conducting tests on said fiber while said fiber is on said spool.

29. The method of claim 28, wherein said tests include at least one test selected form the group consisting of optical time domain reflectometry, dispersion geometry and polarization mode dispersion.

30. The method of claim 28, further comprising conducting at least one optical property test on said fiber while said fiber is on said shipping spool by a testing method which involves connecting one end of said fiber on said spool to a light source, launching light from said light source through said fiber, and evaluating said launched light at the other end of said fiber.

31. The method of claim 20, wherein said imparting a tensile stress comprises feeding said fiber through a screener capstan which works in conjunction with another capstan which is in contact with said fiber to impart said desired tensile stress to said fiber during said draw process, and said screener capstan is rotated at a higher circumferential speed than said other capstan to thereby impart said desired tensile stress.

32. The method of claim 31, further comprising monitoring the tension in the fiber in said draw process and adjusting the speed of said screener capstan in response to said monitored tension, to thereby maintain said tensile stress.

33. The method of claim 32, wherein said monitoring step comprises monitoring said tension via a load cell operatively connected to said fiber.

34. The method of claim 33, wherein said load cell is connected to a pulley which in turn contacts said fiber, said fiber contact causing said pulley to rotate

35. The method of claim 34, wherein a computer monitors said tension in said fiber via said load cell.

36. The method of claim 20, wherein no more than 100 km of fiber is wound onto said spool.

37. The method of claim 20, wherein a length of fiber is wound onto said spool which is sufficiently short to enable the attenuation of said fiber to be measured while said fiber is on said spool.

38. A method of threading a moving length of fiber through a component in a fiber draw, fiber winding or fiber testing process, comprising:

activating an aspirator to obtain said fiber at a first location and moving said aspirator in at least two dimensions to move said fiber to a second location to thread said fiber through a component in said fiber draw process.

39. The method of claim 38, wherein said moving length of fiber is a moving length of fiber in a fiber draw process, and said method further comprises orienting at least a first, second, and third pulley so that, when said aspirator moves said fiber to said second location, said pulleys are disposed along the length of said fiber and on alternating sides of said desired fiber, and said method further comprises moving said

second pulley across the path of said fiber to retain said fiber in contact with said first, second, and third pulleys, thereby causing said fiber to move in a serpentine path.

40. The method of claim 38, wherein said aspirator is moved to guide said fiber onto at least one guide pulley by said aspirator guiding said fiber between or against a pair of surfaces which are disposed on each side of said guide pulley, said surfaces sloping toward said guide pulley to thereby guide said fiber onto said guide pulley.

41. The method of claim 39, wherein said aspirator is moved to guide said fiber onto at least one guide pulley by said aspirator guiding said fiber between or against a pair of surfaces which are disposed on each side of said guide pulley, said surfaces sloping toward said guide pulley to thereby guide said fiber onto said guide pulley.

42. The method of claim 38, wherein said second location is proximate to a fiber winding spool.

43. The method of claim 42, further comprising engaging said fiber at a point along said fiber which is between the aspirator and the source of fiber, and winding said engaged fiber onto said spool.

44. The method of claim 43, wherein said engaging said fiber comprises engaging said fiber by a snagger tooth which is located on said spool

45. The method of claim 38, further comprising engaging said fiber at a point along the length of said fiber which is between the source of said fiber and said aspirator, and moving said engaged fiber to facilitate threading of said fiber through said at least one component of said fiber draw process.

46. The method of claim 45, wherein said engaging a fiber step comprises engaging a moving length of fiber, moving said engaged length of moving fiber into contact with a capstan to thereby thread said fiber around said capstan.

47. The method of claim 46, wherein simultaneous with said threading of said capstan, said aspirator is moving to said second location, and said second location is proximate to a winding spool.

48. The method of claim 47, wherein said moving length of fiber is a moving length of fiber in a fiber draw process, and said method further comprises orienting at least a first, second, and third pulley so that, when said aspirator moves said fiber to said second location, said pulleys are disposed along the length of said fiber and on alternating sides of said desired fiber, and said method further comprises moving said second pulley across the path of said fiber to retain said fiber in contact with said first, second, and third pulleys, thereby causing said fiber to move in a serpentine path.

49. The method of claim 48, further comprising moving said aspirator to guide said fiber onto at least one guide pulley by said aspirator guiding said fiber between or against a pair of surfaces which are disposed on each side of said guide pulley, said surfaces sloping toward said guide pulley to thereby guide said fiber onto said guide pulley.

50. An apparatus for drawing and winding fiber onto a spool, and prooftesting the fiber after drawing of the fiber but prior to the fiber being wound onto the spool, comprising:

a furnace for softening an optical fiber preform sufficiently that a fiber can be drawn therefrom;

a tractor device capable of drawing fiber from said preform at a rate exceeding 20 m/s; a prooftesting device comprising a first tractor assembly downstream of said furnace including at least one wheel and a motor for driving said wheel at a first circumferential speed a second tractor assembly including at least one wheel and a servo motor for driving said wheel at a second circumferential speed the difference between said first and second circumferential speeds creating a desired proof testing tensile stress;

a load cell operatively connected to the fiber for monitoring tension in said fiber; and

a computer control for receiving input from the load cell and adjusting the speed of the first or second tractor assemblies to aid in maintaining uniform tensile stress.

51. Apparatus of claim 50, wherein said second circumferential speed is faster than the first circumferential speed.

52. A method of changing optical fiber storage spools in an optical fiber winding process, comprising:

cutting the fiber being fed from a fiber supply source after a first fiber storage spool has received a desired amount of optical fiber;

capturing the fiber being supplied from said fiber supply source in an aspirator; and

moving said aspirator and a second fiber storage spool with respect to one another to rethread the fiber onto said second fiber storage spool.

53. The method of claim 52, wherein said fiber supply source is a moving length of fiber in a fiber draw operation.

54. The method of claim 52, wherein a snagger tooth on said second storage spool snags said fiber onto said second storage spool.

55. The method of claim 52, wherein said aspirator is moved in at least two dimensions to wind said fiber onto said second storage spool.

56. A method of exposing optical fiber to a tensile screening test comprising:

feeding said fiber through a tensile screening tester which is located in the path of a moving length of optical fiber, said length of optical fiber being drawn from an optical fiber preform, said tensile screening tester located between said preform and a storage spool for collecting said length of

fiber, wherein the tension in said fiber being drawn from said preform is monitored and the tension being applied to said fiber via said fiber tensile tester is adjusted in response to fluctuations in said incoming fiber tension.

57. In a process for winding a length of fiber being drawn in an optical fiber preform in a fiber draw process onto at least one storage spool, the improvement comprising, after the length of fiber has begun to be stored on said at least one storage spool, identifying fiber which is out of specification and removing said out of specification fiber from the source of fiber before the fiber is wound onto said at least one storage spool.

58. The method of claim 57, wherein said method comprises winding said length of fiber onto a first storage spool, and said method further comprises cutting and removing a portion of said length of fiber, and rewinding at least a portion of the remainder of said length of said fiber onto a second storage spool.